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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/099,656	ZHANG, TONG	
	<b>Examiner</b>	<b>Art Unit</b>	
	Quyen P. Leung	2828	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/25/2004.
2. ☒ The allowed claim(s) is/are 1-30.
3. ☒ The drawings filed on 9/3/2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>9/3/2002</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                               | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

### EXAMINER'S AMENDMENT

1. In response to applicant's amendment filed 7/25/2004 the following amendments have been entered:

a. In claim 9 at page 10 of preamendment B, last line, the phrase "or the like" has been deleted.

b. In claim 9 at page 12 of preamendment B, sixth line from the bottom, the overtyped words have been replaced with --laser medium means--.

2. The drawings including amended Figure 15L were received on 9/3/02. These drawings are approved.

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In claim 2 at page 3 of preamendment B, fifth line from the bottom, "mental layer" has been changed to --metal layer--.

In claim 5 at line 8 "preferably at" has been changed to --at one of--.

In claim 8 at page 9 of the preamendment B, eighth line from top, "preferably at" has been changed to --at one of--.

In claim 8 at page 11 of the preamendment B, line 12, "preferably" has been deleted.

In claim 10 at page 15 of the preamendment B, ninth line from bottom, "more particularly" has been changed to --and--.

In claim 11 at page 16 of the preamendment B, seventh line from the bottom, "preferably at" has been changed to --at one of--.

In claim 12 at page 18 of the preamendment B, eighth line from the top, "preferably" has been deleted.

In claim 13 at page 19 of the preamendment B, fifth line from the top, "preferably" has been deleted.

In claim 15 at page 20 of the preamendment B, first line, "preferably" has been deleted.

In claim 15 at page 20 of the preamendment B, thirteenth line, "preferably" has been deleted.

In claim 15 at page 20 of the preamendment B, sixth line from bottom, "preferably" has been replaced with --and is--.

In claim 16 at page 21 of the preamendment B, the third line from top, "or the like" has been deleted.

In claim 25 at page 27 of the preamendment B, sixth line from top, "preferably at" has been changed to --at one of--.

In claim 27 at page 28 of the preamendment B, last line, "preferably" has been deleted.

In claim 30 at page 31 of the preamendment B, tenth line from bottom, "preferably" has been deleted.

4. The following is an examiner's statement of reasons for allowance:

The claims are allowed mainly because the cited prior art do not teach or fairly disclose the combination of a zig-zag laser slab collaborated with a one-dimensional prism beam-expanding cavity, as recited in independent claim 1; a means of an optical duct means to make multipass TIR(total internal reflection)-guide pump head for a zig-zag laser slab, as recited in independent claim 9; a multipass apparatus which provides by means of optical TIR-guide disk reflector a configuration for pumping thin disk lasers, building an optical amplifier or building an optical or spectral detection, as in independent claim 26; a method which provides by means of intense uniform multipass pumping and setting a laser gain region with a limited length at the out of phase location in order to minimize spatial hole burning effect, a solid state laser with high power operation at a desired minor laser line, as in independent claim 30.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quyen P. Leung whose telephone number is (571)272-1943. The examiner can normally be reached on 8-4:30, M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun Harvey can be reached on (571)272-1835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Quyen P. Leung  
Primary Examiner  
Art Unit 2828

QPL